

REMARKS

This Amendment is submitted in reply to the final Office Action dated April 17, 2008, issued in connection with the above-identified application. A two-month extension of time and a request for continued examination (RCE) accompany this Amendment. Claims 1, 5, 6 and 13 are all the claims pending in the present application. By this Amendment, claims 1 and 19 have been amended and no new matter has been introduced by the amendments made to the claims. Favorable reconsideration is respectfully requested.

In the Office Action, claims 1, 5, 6 and 13 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Samson et al. (U.S. Patent No. 4,654,857, hereafter “Samson”) in view of Brightman et al. (U.S. Publication No. 2006/0292292, hereafter “Brightman”). The Applicants have amended independent claims 1 and 13 to help further distinguish the present invention from the cited prior art. For example, claim 1 (as amended) recites the following features:

“[a] data transmission/reception apparatus for performing a data transfer by a pipeline technique between a predetermined number of processing sections, each processing section being capable of performing a data process and the predetermined number of processing sections being two or more, said apparatus comprising:

a predetermined number of intermediary sections for interconnecting a first data processing section and a second data processing section and allowing data processed by the first data processing section to be transmitted to the second data processing section, the first data processing section and second data processing section being adjoining data processing sections, and said predetermined number of intermediary sections being smaller by one than the predetermined number of processing sections, ...

wherein said predetermined number of intermediary sections generate a data queue for retaining data to be transferred when said predetermined number of intermediary sections detect that both the first data processing section and the second data processing section are the active processing sections, and said predetermined number of intermediary sections do not generate the data queue when said predetermined number of intermediary sections detect that either the first data processing section or the second data processing section is the passive processing section.”

(Emphasis added).

The features emphasized above are similarly recited in independent claim 13. Additionally, the above features of the present invention are fully supported by the Applicants' disclosure.

As amended, independent claims 1 and 13 emphasize that the data transmission/reception apparatus and method of the present invention determine whether or not to generate a data queue dynamically. For example, a predetermined number of intermediary sections determine whether or not to generate a data queue when the predetermined number of intermediary sections detect that both the first data processing section and the second data processing section are the active, or that either the first data processing section or the second data processing section is passive. No such feature is believed to be disclosed or suggested by the cited prior art.

In the Office Action, the Examiner relied on Samson in view of Brightman for disclosing or suggesting the features of independent claims 1 and 13. Specifically, the Examiner relied on Samson for disclosing all the features of claims 1 and 13, except for a data transmission/reception apparatus that includes a predetermined number of processing sections or means being either active or passive. The Examiner relied on Brightman for overcoming the deficiency in Samson, and disclosing or suggesting this feature. However, the Applicants assert that Samson in view of Brightman fails to disclose or suggest the features now recited in independent claims 1 and 13 (as amended).

Samson discloses a digital data processor with high reliability. Specifically, a fault-tolerant computer system provides information transfers between units of a computing module, which includes a processor unit, a memory unit, and one or more peripheral control units. The information transfers are facilitated by a bus structure common to all units.

In the Office Action, the Examiner alleges that the "bus structure" disclosed in Samson corresponds to the "intermediary sections or means" of the present invention. However, Samson fails to disclose or suggest at least that the bus structure determines whether or not to generate a data queue when the bus structure detects that both a first data processing section and a second data processing section are the active, or that either the first data processing section or the second data processing section is passive, as recited in claims 1 and 13 (as amended).

Moreover, Brightman fails to overcome the deficiencies noted above in Samson. Brightman discloses an integrated circuit for processing streams of data packets. In the Office Action, the Examiner points to the use of data queues in Brightman for disclosing our suggesting a predetermined number of processing sections or means being active or passive.

However, Brightman fails to disclose or suggest at least determining whether to generate a data queue when it is detected that both a first data processing section and a second data processing section are the active, or that either the first data processing section or the second data processing section is passive, as recited in claims 1 and 13 (as amended).

Accordingly, no combination of Samson and Brightman would result in, or otherwise render obvious, independent claims 1 and 13 (as amended). Likewise, no combination of Samson and Brightman would result in, or otherwise render obvious, claims 5 and 6 at least by virtue of their dependency from independent claim 1.

Based on the foregoing, the Applicants respectfully submit that all the pending claims are patentable over the prior art of record. Thus, the Applicants respectfully request that the Examiner withdraw the rejections presented in the Office Action dated April 17, 2008, and pass the application to issue. The Examiner is invited to contact the undersigned attorney by telephone to resolve any remaining issues.

Respectfully submitted,

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